



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,135	06/02/2005	Karen I Trovato	US020476US	1168
24737	7590	08/18/2010	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			LEE, Y YOUNG	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2621	
MAIL DATE		DELIVERY MODE		
08/18/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,135	<b>Applicant(s)</b> TROVATO, KAREN I
	<b>Examiner</b> Y. Lee	<b>Art Unit</b> 2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 11 August 2010.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-18 and 20-22 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-18 and 20-22 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 26 April 2010 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/06)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/11/10 has been entered.

### ***Drawings***

2. The drawings were received on 4/26/10. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutta et al (WO 02/071315) in view of Liu (6,553,281) and Jeong (6,348,928).

Gutta et al, in Figures 1 and 2, discloses an automatic positioning of display depending upon the viewer's location that is substantially the same apparatus as specified in claims 1-18 and 20-22 of the present invention, comprising a device 24; an arm assembly 36 having a first end 32 connected to a fixed support 28 and a second end 40 connected to the device 24, the arm assembly having actuating means 36 for positioning the device 24; a sensor 48 configured to detect and provide information about a subject 10 within a sensing range of the sensor 48, the

subject 10 having eyes, and the sensor 48 being calibrated with a location of the subject 10 corresponding to a position and orientation; and a processor 52 configured to process the information, the processor 52 further being configured to determine a current location (e.g. Fig. 1) of the subject 10 in response to the processed information, determine a first location corresponding to an optimal position (e.g. X-axis) based on the current location of the subject 10, for use of the device 24 by the subject 10, and control the actuating means 36 to move the arm assembly to position the device 24 at a second location relative to the first location within a configuration space of allowable device positions (e.g. Fig. 1, dotted positions), the second location further corresponding to an achievable position within the configuration space nearest the optimal position (e.g. Fig. 2), wherein the processor 52 is further configured to monitor the positions of the subject 10 and device with respect to each other (e.g. X-Y axes).

Although Gutta et al discloses using common image recognition technique to calibrate the sensor and align the device corresponding to the position and orientation of the subject, it is noted Gutta et al differs from the present invention in that it fails to particular disclose details image recognition software as specified in claims 1-18 and 20-22 of the present invention. Liu however, in Figures 1 and 4, teaches the concept of such well known calibration technique wherein the fixation point is the midpoint of the eyes.

Furthermore, although Gutta et al discloses the positions of the subject 10 and device 24 are monitored with respect to each other and adjustments are made in response to monitoring a change in the subject's position with respect to an object for a situation in which the subject moves (e.g. negative matches) so that an orientation of an image displayed via the device appears to change in the positions might cause the device to confuse the subject are detected (e.g. among

multiple viewers), it is noted Gutta et al differs from the present invention in that it fails to particularly disclose a confusion warning notice is displayed on a screen for certain changes. Jeong, however, teaches the concept of such well known technique wherein the positions of the subject and device 1 are monitored with respect to each other and the confusion warning notice 80 is being displayed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having all three of the references of Gutta et al, Liu, and Jeong before him/her, to exploit the well known detection technique as taught by Liu and the warning technique as taught by Jeong in the sensor of Gutta et al in order to achieve highly precise monitoring of the subject as a reference point for accurate positioning of the device.

With respect to claims 2-18 and 20-22, Gutta et al also discloses the first location and the second location are the same (e.g. no adjustment); the processor determines a path of the movement of the arm assembly to the second location using inverse kinematics (e.g. Fig. 2); wherein the processor determines a path of the movement of the arm assembly to the second location using path planning (e.g. dotted lines and arrows in Fig. 2); wherein the fixed support is a single a pole 32; wherein the device is a lens and thyroid protector (e.g. video projection screen); wherein the second location is chosen from two or more predetermined positions (e.g. Fig. 2); wherein the processor causes the actuating means of the arm assembly to move the device to a rest position if the subject is not detected (e.g. default position); a second sensor, the second sensor being configured to detect the presence of a person who is not the subject and being operatively coupled to the arm assembly to prevent movement of the arm and the device if any said person who is not the subject is detected (e.g. face recognition); wherein the first

location is determined based on optimal use of the device by the subject (e.g. pre-programmed adjustments); and wherein the first location is determined based on optimal viewing by the subject through the device (e.g. facing the subject).

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-18 and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (571) 272-7334. The examiner can normally be reached on (571) 272-7334.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Young Lee/

Application/Control Number: 10/537,135  
Art Unit: 2621

Page 6

Primary Examiner  
Art Unit 2621

yl